

# New Materialism? A View from Sociology of Knowledge

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*Foucault évite avec génie toute thèse métaphysique alors que Deleuze produit une métaphysique neuve.* (David-Ménard 2008, p. 43)

*If we desire a record of uninterpreted experience, we must ask a stone to record its autobiography.* (Whitehead 1978, p. 15)

## 1 Introduction

Over<sup>1</sup> recent decades, new materialism has established itself as a challenge to epistemological and ontological grounds of theory and research in the humanities and in the social sciences. Its core claim is that there is an ongoing neglect and false conception of materiality which has to be replaced by an ontology of relational becoming. The work of Gilles Deleuze (and Felix Guattari) is often referred to as presenting the principal philosophical ground. Concepts like “intra-actions” (Barad 2007) or “vibrant matters” (Bennett 2009) from new materialism, and others like the “posthuman” (Braidotti 2013), “assemblages” (DeLanda 2006), or “affects” (Massumi 2002) from linked turns successfully address a range of researchers across disciplines who look for new concepts, ideas, research funding

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and political projects to follow. With mostly philosophical (speculative realism) and arts-based backgrounds, the new materialism(s) tend to have rather general ideas about the state of disciplines and social research which do not account for the complexities and diversity of the fields they critically address. This is in part due to their coming into existence “beyond disciplines,” which certainly presents some advantages in opening up narrow perspectives, but which also runs the risk of ignoring what is actually done in such disciplines, thereby missing possible anchor points and affinities in established work. In the following I first sum up a few core critical arguments against an all too naive reception of new materialism and related turns in sociology. In a second step I will argue how questions of materiality can be (and have been) dealt with in interpretive sociologies. A third step considers how materiality comes into play in sociology of knowledge-based discourse studies.

## **2 Is There Something Wrong with New Materialisms?**

“New materialism,” sometimes used in the plural as “new materialisms” (Coole and Frost 2010), refers to a movement in philosophy, feminist thinking and arts-based theories, which argues for a new taking into account of the material in intellectual thinking and cultural research. It has close relations to some other current pleas for turns, like the affective turn or the posthumanist turn. Given the heterogeneity of the main protagonists of those turns, it is hard to address them with a few general arguments. But it does seem that all of them have in common a far reaching ignorance vis-à-vis sociology in general, and its particular traditions (like interpretive sociology) and specialties (e.g., medical sociology, sociology of the body, and sciences and technology studies). Authors of new materialism and linked turns like to present generalized arguments about all the failures and voids of empirical social research, e.g., when addressing harsh critiques to “social constructivism” as a “representational mode of thinking” without giving concrete references to statements or texts (cf. Barad 2003, p. 802). Nevertheless, the reception of their philosophical arguments in sociological research gains more and more ground. This happens despite a set of severe critiques which have been addressed to the new materialists and related turns. As I have summarized main points of critique elsewhere (Keller 2017), I would like to recall only a few of the most important in the following:

1. *The problem of founding gestures*

An early major critique has been formulated by feminist scholar Sara Ahmed, against the “Founding gestures of the ‘new materialism’” (Ahmed 2008). Discussing the recent genealogy of new materialism in feminist theory and research she writes:

In this position paper, I want to consider what it means for it to be routine to point to feminism as being routinely anti-biological, or habitually ‘social constructionist.’ I examine how this gesture has itself been taken for granted, and how these gesture both offers a false and reductive history of feminist engagement with biology, science and materialism, and shapes the contours of the field that has been called ‘the new materialism’. (Ahmed 2008, p. 24)

As she explains, the main accomplishment of such a gesture is to install a “minority position [...], that must be freed” (ibid., p. 32). Therefore the work of an author like Judith Butler, for example, is reduced to a shorthand version of social constructivism and is then subject to heavy critique: “Feminism it seems has forgotten how matter matters. [...] Barad is offering a caricature of ‘the turns’ in recent theory, although no examples are provided to illustrate the argument. We have not idea of who she is actually referring to [...]” (ibid., p. 33–34). Thus Ahmed demonstrates how new materialism establishes itself as the new heroic “must do” in theoretically advanced thinking and empirical research for the humanities and social sciences through establishing a highly distorted image of past work.

2. *A new scientism?*

A second critique refers to the role science (and neuroscience for the affective turn) plays in the work of some protagonists of the materialist turn. Trevor Pinch (2011) convincingly showed how leading iconic author Karen Barad, in her major book establishing “agential realism,” either completely ignores or misinterprets social studies of science and technology in order to construct her counter-position. He relates his surprise when Barad referred to Niels Bohr’s interpretation of quantum mechanics in order to make her core arguments:

I asked her whether she thought it not more than a little odd that a metaphysical position in science studies should depend upon the outcome of experiments in physics. Supposing the experiments had come out differently? Would we then have to kiss goodbye agential realism? Her answer was even more surprising. She told me that she was happy for her work in science studies to stand or fall alongside the best work in physics. Ouch! (Pinch 2011, p. 432)

Barad indeed presents her quantum-physics based ontological and epistemological arguments for a different vision of materiality in the social sciences and humanities without discussing the latter's established and differentiated epistemologies. As a recent review of current developments in quantum physics states, it seems very likely that Bohr's theory is wrong (Albert 2018). What consequences for agential realism?

3. *A new spiritualism?*

For several decades now actor-network-theory has established arguments for a symmetrical approach in science and technology studies, and sociology in general (Latour 2007). Some authors in new materialism, inspired by the legacy of Deleuze, add to his arguments more spiritual elements. Jane Bennett, for example, pleads for an "enchanted materialism" and the recognition of "vibrant matters." According to Thomas Lemke (2018, p. 9) and his close examination of Bennett's case studies on omega-3 and the power blackout in the US from 2003, "Bennet confronts us with a romanticized and one-sided picture of the 'vitality of things,'" and with some kind of metaphysics which is full of "conceptual ambiguities" and "analytic shortcomings" and creates major problems for political prospects.

Karen Barad, too, promotes a vitalist conception of matter. In her words, "matter feels, converses, suffers, desires, yearns and remembers" (Interview with Karen Barad in Dolphijn and Van der Tuin 2012, p. 48). Such a vitalism seems not to be just metaphoric (and thereby a humanist projection onto matter) but rather expands qualities of life to everything real, with humans being just one manifestation. Such a stance has been established mainly for political reasons, according to Gilles Deleuze's vitalism and theory of immanence, itself based on Spinoza's animism (e.g., Marks 1998), amongst others. As in Bruno Latour's work, pointing to symmetry and the "vitalism of the material" should actually provide the grounds for a sound and emancipatory political ecology and politics of care toward all vibrant matters and things vital. But as Puig della Bellacasa (2011, p. 90; Keller 2017a) argued against Latour, such a symmetrical politics of care runs the risk of losing basic criteria for preference building and decision making in situations of conflict. She therefore asks the crucial question: In case of conflict, what vitality would matter more? The one of a SUV going to some village in the night, or the one of a few frogs crossing a street that same night? How to compare and evaluate? Consequently, Katharina Hoppe and Thomas Lemke (2015) argue in a contribution which gives much credit to Barad, that agential realism presents an overdrawn and naive understanding of the ethics of care for matter which completely obstructs the conditions for establishing a solid conception of politics. *There are no ethi-*

*cal criteria given to evaluate different intra-actions according to their ethical value, and for dealing with humans in a post-human ethics.* Hoppe and Lemke thus point to a missing conception of the political and of power in Barad, and complain of a reduction of politics to ethics. In sum here, it seems that the ethical stance of new materialism, its animism or implicit spiritualism will make a future politics of generalized care even more difficult than it is already now. What if it is the presage of a new *spiritualist turn* (Keller 2017b)? Will the humanities and social sciences enter a new era not of scientific wars but of religious wars?

4. *Deleuze goes research?*

In her critical discussion of Brian Massumi's affect theory, discourse analyst Margaret Wetherell writes:

Translating this [the philosophy of Deleuze] into the registers of social research requires care. Formulating a philosophy of force, becoming, potential, encounter and difference is a different enterprise from working out the most useful approaches for investigating specific affective phenomena and their consequences [...]. (Wetherell 2012, p. 3)

Wetherell here refers to the rich conceptual and empirical work on affects and emotions established in the humanities and social sciences for quite some time, but largely ignored by the protagonists of affect theory. Indeed, here again we encounter a problem of discipline and tradition, and an absence of historical mindedness. Someone arguing "from the outside" might well not know what has already been done "inside" the disciplines, without some research. This creates particular trouble when people from "inside" take the argument at face value and use it as an internal critique, also without checking it seriously. This argument is made by Sara Ahmed (2008) quoted above vis-à-vis feminist research, and by Elizabeth St. Pierre (2015) and Thomas Lemke (2015) against Barad's critique of Foucault. St. Pierre (2015, p. 77) states it as follows: "But I argue that poststructural theorists, including Derrida, Foucault [...] very clearly addressed ontological issues and the material half a century ago."

New materialism itself oscillates between an attitude of being "beyond discipline" and its own "becoming disciplined." The first position is expressed by Rick Dolphijn and Iris van der Tuin (2012, p. 93–114) who broadly discuss the "transversality of new materialism." In a close move, Elisabeth St. Pierre (2015) complains about a common "bad" usage of new materialism and the vocabulary of Gilles Deleuze in current textual production (cf. Hein 2016).

She especially addresses research based on the “new materialist” interview for its privileging of “the authentic voice of the unique individual” and the “speaking subject” (St. Pierre 2015, p. 79):

[...] in reviewing manuscripts submitted to journals in which authors claim to be doing new empirical, new material, posthuman, and post qualitative work, I find myself hard-pressed to see what’s ‘new’ about much of it. [...] For example, they might include in the theoretical sections of their papers a smart discussion of DeleuzoGuattarian concepts they say informed their research, but then they proceed to describe their projects as conventional humanist qualitative studies using the ontological assumptions, language, and practices of that methodology. In effect, they simply drop one or two Deleuzian concepts into a qualitative study and, of course, the ontologies are incommensurable. (St. Pierre 2015, p. 82–85)

At the same time, according to St. Pierre, writing a textbook on “how to do” new empiricist, new materialist, post qualitative research in the legacy of Deleuze would just be a contradiction in itself, because it would standardize a process which is defined per se by its splitting up of disciplined ways of practice: “If such a book were written, it would be the contrary to the very image of thought Deleuze and Guattari created” (St. Pierre 2015, p. 78).

Nevertheless, this is exactly what happens. Consider, for example, the new manual about “*Sociology and the New Materialism: Theory, Research, Action*” (Fox and Alldred 2016). This work presents blueprints for new materialist research centered around the works of Barad, Braidotti, Latour and others, and focusing the so called “Deleuzian” concept “assemblage,” which in itself is a transforming translation of the original French “agencement” (which is closer in English to “arrangement” or to the Foucauldian “dispositif”).<sup>2</sup> In Fox and Alldred (2016, p. 40–41), the introduction of “assemblage” as core concept is combined with a complete rejection of all kinds of established common usage sociological vocabularies referring to “fixed” entities (like “bodies,” “plants,” “animals,” “economic and political systems,” “consumers,” “governments,” “beliefs,” “values,” “institutions,” “political movements,” “discourses,” “systems,” “structures,” “mechanisms”).

The arguments presented so far might account for the impression that “new materialist” empirical work done recently in sociology and close disciplines, seems to be, in its observations and results, much closer to common interpretive and qualitative research than it claims to be by referring to the “new turns.”

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<sup>2</sup>The translation produces a different connotation and a different relation to other concepts in Deleuzian philosophy as well as a different symbolic horizon for empirical research (see Wetherell 2012, p. 15; Philipps 2006, p. 108–109).

Such “new materialist” work accounts for situational context-driven shifting meanings attributed by human beings to things, objects, artefacts and processes they encounter in different crucial periods and situations of their lives (Schwennesen and Koch 2009; Schadler 2013; Höppner 2015). Interpretive approaches such as those used in symbolic interactionism or ethnomethodology and the sociology of knowledge would have ended up with very similar results. Thus it might well be the case that, according to St. Pierre, this work does not yet fulfill the “new” promise of new materialism and Deleuzian thinking. This remains to be seen. Nevertheless, it leads me to my next point: How can we deal with questions of the material in sociology in a more explicit and reflexive way? What concepts can we draw upon for such a purpose? Having discussed some of the external and internal critiques of new materialism, I also want to strongly emphasize that new materialism importantly points to some neglected issues in social thinking and research, and thereby can rightly make our research agenda more complex. But, as I will argue in the next section, such a turn does not set aside the core arguments of the older *interpretive turn* and its insistence upon moves of “interpretation” that we must make as part of doing research. Indeed I agree with Alfred North Whitehead’s old statement: “If we desire a record of uninterpreted experience, we must ask a stone to record its autobiography. Every scientific memoir in its record of the ‘facts’ is shot, through and through, with interpretation” (Whitehead 1978, p. 15).

### **3 Interpretation as Entanglement and Interrelation**

Sociology, since its origins in the 19th century, can be considered the science centered on the decentered subject. Diverse strands and sub-paradigms always included research about objects, artefacts and “nature” as well. Consider for example Karl Marx and Friedrich Engel’s analysis of relations of production and the way they historically transform, or Georg Simmel’s sociology of things which addresses the work that clocks (disciplining, rationalizing), doors (separating) and bridges (linking) do (e.g., Simmel 1994). Such a list could go on and on. It might well also be associated with Peter Berger and Thomas Luckmann’s (1966) reflections upon the processes of social objectification which establish social objects (such as language, heteronormativity and other institutions) as “hardened facts” that humans must confront. With close affinities to Whitehead’s argument about interpretation quoted above, Herbert Blumer pointed to the core role of meaning attribution in the relation between human beings and their objects social,

artefacts, or “natural.” In his work on the “methodological position of symbolic interactionism” and its premises, he writes:

The first premise is that human beings act toward things on the basis of the meanings that the things have for them. Such things include everything that the human being may note in his world – physical objects, such as trees or chairs; other human beings such as a mother or a store clerk, [...] institutions, as a school or a government [...]. The second premise is that the meaning of such things is derived from, or arises out of, the social interaction that one has with one’s fellows. (Blumer 1969, p. 2)

Meaning, in the first premise, does not refer to the particular importance of an object or artefact, such as in “This is *my favorite* car.” At least this is only one possible reading of it. In more general terms, it points to the basic capacity of human beings to define the situations they confront, to interpret what is going on, and what the elements of that situation are. *There is no “beyond interpretation.”* I suppose that new materialists would object to this position mainly because of the second premise which points to social interaction as the basis of such an interpretation. But in fact it is an argument about relationality in meaning making, the role of conventions (such as language) and our embeddedness in social worlds. Meaning making is not an individual, but a social act. So what then is the role of objects in this setting? Let us consider Blumer’s third premise, which goes as follows: “The third premise is that these meanings are handled in, and modified through, an interpretative process used by the person in dealing with the things he encounters” (Blumer 1969, p. 2). This premise introduces the object itself as an agency that the person must deal with in situations. Here Blumer refers back to pragmatist philosophy of thought and action which begins from the assumption that we can consider human activity (as well as activities of other living beings) as particular ways of dealing with the world, the real, and the problems it presents for some embodied existences in their singular and collective existences. “Meaning” is not some *inherent quality* of objects and situations, but the *outcome of situated and structured performances*, that is of *processes of interpretation* (ibid., p. 5):

Human group life on the level of symbolic interaction is a vast process in which people are forming, sustaining and transforming the objects of their world as they come to give meaning to objects. Objects have no fixed status except as their meaning is sustained through indications and definitions that people make of the objects. (ibid., p. 12)<sup>3</sup>

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<sup>3</sup>The origin of Susan Leigh Star’s concept of “boundary objects” can be discerned in this quote.



In their lines of action and interaction, humans are continuously involved in defining situations and the meanings of objects, adjusting, evaluating and elaborating such definitions according to the obstacles and successes they confront in doing so across diverse situations. Here what Andrew Pickering calls the “mangle of practice” comes into play, as a ground of challenges, impositions, resistances and corrections to such action and purposes presented by diverse objects and their social and physical materialities and qualities. We might call this the “agency” of objects or things. Blumer indeed does not say much about the way such an agency works in real situations. He loosely refers to the pragmatist philosophers of the early 20th century, especially to George Herbert Mead. Nevertheless much work in interpretive sociology (and beyond) deals with individual or collective problems of action and interaction “caused” by some physical situation (like damages produced by a flood, or climate change and environmental issues), some object or artefact (like a drug, a building, a technical infrastructure, a car or a photograph), some other beings (like bees, horses or dogs), or some situation of “affectedness” (like fundamentalism, mass behavior, love, etc.). My main question here is what does it mean then to include “the agency of objects and non-humans” in our analyses? My *first thesis* is that, according to Blumer and Whitehead for example, we cannot escape interpretation. The materiality and agency of things and affects can only be approached via *either the interpretation produced by the human actors involved in some situation (as accounts of first order interpretations), and/or via interpretations of a situation produced by observers (second order observation)*, be it sociologists or other kinds of experts, and in more or less elaborated procedures of an epistemological break. If a new materialist account claims to see what some materiality does with a human, it tacitly ignores the fact that it is not more than an interpretation from a less involved observer, and there may well be others. In principle, there is nothing wrong with this, as long as the account does not claim to be a pure and true account of intra-action or agency between objects and humans or other beings, uncontaminated by involvement, interpretation, and even affect.

My *second thesis* here therefore is that we can have a more precise understanding of the interpretation of such an agency when we refer to the position of social phenomenology as elaborated by the Austrian thinker Alfred Schütz (1967, 1973; Schütz and Luckmann 1989). The main argument for this lies in the role that the phenomenology of Edmund Husserl and the ideas of Henri Bergson and

pragmatist philosophy play in the work of both Gilles Deleuze and Alfred Schütz (see Depraz 2011; Rölli 2012; Deleuze 1994; Deleuze 1990).<sup>4</sup>

Edmund Husserl tried to bring philosophy “back to the things themselves” (Husserl 2001, p. 168). “Phenomenology,” according to Husserl, is “the study of things as they appear” (Smith no date, p. 4) to human beings. That is, phenomenology starts with a relation between an object (some physical or symbolic/social object) and the way it appears or “is given” in a human consciousness. The important point here is that there is no pure existence of an object in itself, but only the intentionality of a particular human consciousness. This does not imply a one-way directedness, but means “precisely” the basic condition of relatedness, entanglement and inter-relation – being aware of “*something*.” So the appearance is not a purely active mode of relation, but also a way of being affected by a sensory experience (from the outside *or* from within the embodied being). When George Herbert Mead talks about the “objective reality of perspectives,” that is the plurality of worlds according to the plurality of entanglements constituting phenomena as phenomena for some being, he is referring to such a relation (or plurality of relations).

Alfred Schütz, in his discussion of the works of both Henri Bergson and Edmund Husserl, takes an important step forwards here. In full accord with the role of temporality and the questions of the actual given which much later lead Gilles Deleuze to a discussion of the relation between actual events, difference and repetition, Schütz discusses the way a human being’s consciousness constitutes order out of its being affected by the worldly given through its sensual experiences, “not a world of being, but a world that is at every moment one of becoming and passing away – or better, an emerging world” (Schütz 1967, p. 36). Schütz and Luckman (1989) further insist on the embodied conditions of perception, and on the complexity of passive as well as active elements present in human definitions of a situation:

[E]xperiences are constituted as thematic kernels within the syntheses of consciousness; in the constitution of experiences, interconnected thematic, interpretative, and motival relevances work together systematically. [...] The lived experience of a visual object of perception includes, for example, not just the view of the front side, given impressionally and currently in direct evidence, but also its hind side, which

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<sup>4</sup>We can add Schütz’s reading of Whitehead, Mead, James and many more here. The arguments presented in the following are certainly in need of elaboration. For a close argument against new materialism see Lynch (2014).

is appresented simultaneously – though not in original evidence. [...] Even before overlaying by objectivations (mainly semantic classifications) which are socially mediated and deposited linguistically in the subjective stock of knowledge, a schematic context of tactile, olfactory, and utilitarian qualities is (in our example of a seen object) fused through passive syntheses with the actually grasped visual form. All these syntheses, including the appresentations of the type subjectively relevant in each case, produce the unity of everyday objects, qualities, and events taken for granted in the natural attitude. They cause the apparently simple occurrence of these objects, qualities, and events in the course of lived experience. (Schütz and Luckmann 1989, p. 2)

All this is far from being just an idealistic analysis. On the contrary, the human others as well as other living beings, objects, physical processes and conditions, and so on, and last but not least our bodies and their given, changing materiality are each and all very basic *conditions of processes of apperception* (Schütz and Luckmann 1989, p. 17). It is important to note here that this “happens to” the individual in and via his/her embodied sensual experience rather than being produced by him or her by an act of will. Thus “being affected by X” can be considered a basic situated relation between a human being and its present situation. Schütz, in a very precise way, discusses how the complexity and multiplicity of sensory events mostly occur below the level of conscious recognition and conceptual representation. Nevertheless, they are deeply interwoven with intentional considerations and relevance structures which we use to develop actions in situations. Here again, following Schütz and Luckmann (1989, p. 182–228), we can distinguish between “imposed” relevances produced by some kind of “outside” (like rain, or a bad smell) or “inside” materiality (like a pain) affecting our perception, experience and action, and those “chosen ones” guiding our plans for action until further correction is needed. To give an example of explicit relevances: you may look at this text rather differently as a sociologist interested in its arguments or an editor looking for minor or major faults of type-setting, or someone just looking for a piece of paper for writing some notes. Nevertheless, the shape of black and white, the texture, the smell, the letters might affect you in ways beyond your current interest and even direct you to very different purposes. Schütz’s example is that of entering a bedroom somewhere in a country where it might be important to know if there is a rope under your bed, or a snake. The presence of an unclear, not yet defined object might be an important action problem you have to deal with.

Consider the following famous quote by Marcel Proust, which nicely illustrates the different and complex elements which produce the situation of “being affected” by some materiality<sup>5</sup>:

And soon, mechanically, dispirited after a dreary day with the prospect of a depressing tomorrow, I raised to my lips a spoonful of the tea in which I had soaked a morsel of the cake. No sooner had the warm liquid mixed with the crumbs touched my palate than a shiver ran through me and I stopped, intent upon the extraordinary thing that was happening to me. An exquisite pleasure had invaded my senses, something isolated, detached, with no suggestion of its origin. [...] Whence could it have come to me, this all-powerful joy? I sensed that it was connected with the taste of the tea and the cake, but that it infinitely transcended those savours, could not, indeed, be of the same nature. Where did it come from? What did it mean? How could I seize and apprehend it? [...] Undoubtedly what is thus palpitating in the depths of my being must be the image, the visual memory which, being linked to that taste, is trying to follow it into my conscious mind. [...] And suddenly the memory revealed itself. The taste was that of the little piece of madeleine which on Sunday mornings at Combray (because on those mornings I did not go out before mass), when I went to say good morning to her in her bedroom, my aunt Léonie used to give me, dipping it first in her own cup of tea or tisane. (Proust 1981, p. 57–59)

First there is the description of a particular setting; then some event occurs. A present artefact affects the author and he is trying to figure out what happens. So a more or less systematic procedure of inquiry starts, and he ends up by identifying the grounds for his being so affected by an embodied memory of his youth. Do we see here an account of how some materiality (the Madeleine bakery, a physical act) performs an agency towards a human being? Yes – *and no*. Yes, because the actual presence of the new object introduces a quality of meaning attribution into the situation which was not present before. No, *because all we have is the interpretation given by the observing and speaking author*. As we know from false memories, we cannot judge from his telling here and now about some past presence of a similar object and its effects. We would need to ask other people to confirm that past situation. All we have access to is the *interpretation* of the given elements by the author – or, if we do not trust his interpretation, by some outside observer (like myself, a sociologist). The very same situation can therefore be addressed through a broad range of interpretive vocabularies which each and all would offer a different account of what is actually going on. If an

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<sup>5</sup>I choose this quote because Deleuze refers to it several times (see, for example, Deleuze 2000).

observer just states that this or that object has this or that agency in a given situation, he or she is performing interpretation, too, and not merely a naturalistic, self-evident description. Who is the “self” in “self-evident,” after all?

Returning to Schütz, one major point has to be added here. Schütz talks about the constitution of meaning in the human consciousness, about the ways Blumer’s “interpretation” or Thomas and Thomas’s “definition of the situation” actually happens. Into the processes described above of how human consciousness is affected by its relations to an outside world (including its body and former thoughts as “outside world”) Schütz introduces the idea of “types” or “interpretive schemes” as elements of conscious reflection, indicating the presence of some phenomenon in the embodied mind. Such a state of mind is, according to Schütz, a particular state, as most of our actions and interactions happen just below the level of conscious reflection, as ongoing performative accomplishments produced by our body and its sensory apparatus. Consider the situation of a classroom lecture: your body performs sitting upright, distinguishing a situational context with light, walls, people, some kind of desk or writing platform, sounds, smells etc., while you try to concentrate upon what some speaker says (or on what you need to buy later for your planned dinner party with friends). Such an ongoing definition of situations is stabilized by common interaction. It would be difficult for you to continue with your idea of a classroom situation if all the other human beings present refer to it as a birthday party. And it is performed with all the physical, social and ideational present stuff which then “affects” your processes of apperception. A “classroom situation” is itself what Schütz would call a “type” or an “interpretive scheme.” Here is how the social enters in:

We shall call the process of ordering lived experience under schemes by means of synthetic recognition ‘the interpretation of the lived experience,’ and we shall include under this term the connection of a sign with that which it signifies. Interpretation, then, is the referral of the unknown to the known, of that which is apprehended in the glance of attention to the schemes of experience. These schemes, therefore, have a special function in the process of interpreting one’s own lived experiences. They are the completed meaning-configurations that are present at hand each time in the form of ‘what one knows’ or ‘what one already knew.’ They consist of material that has already been organized under categories. To these schemes the lived experiences are referred for interpretation as they occur. In this sense, schemes of experience are interpretive schemes, and from now on let us call them such. The interpretation of a sign through reference to a sign system is only a special case of what we have in mind [...]. (Schütz 1967, p. 84)

Such schemes of experience are historically produced, established and transformed by human collectivities in their historically situated common actions towards

the world. They are parts of *collective stocks of knowledge*, which are stabilized and transformed in encounters with problems of both individual and collective action (cf. Schütz and Luckmann 1989). This not only includes types (signs) full of connotations such as “table,” “chair,” “god,” “love,” “flood,” “mother” and their related phenomena. It also includes what C. Wright Mills (1940) called “vocabularies of motives” and Schütz labels “plans for action.” The *social* stocks of knowledge deeply shape the way human beings perceive, that is, interpret the situations they encounter – and the relevances imposed to them by some external “agencies”:

It is clear that for certain problems a person’s stock of knowledge is more than adequate and that for other situations he must improvise and extrapolate, but even improvisation proceeds along typically possible lines and is restricted to the individual’s imaginative possibilities. Those possibilities, in turn, are grounded in the stock of knowledge at hand. Finally, the typifications which comprise the stock of knowledge are generated out of a social structure. Here as everywhere, knowledge is socially rooted, socially distributed, and socially informed. (Schütz 1973, p. XXVII)

For Schütz, the individual’s articulation of the definition of a situation through an interpretive scheme is based upon different kinds of signs – signs given and signs given off. He therefore elaborates a complex theory of signs, distinguishing between marks, indications, signs in the proper sense (like letters/words, oral/written language, iconic signs) and symbols. The *realized presence* of some material object and its qualities in the human mind is based on a process of apperception which itself is affected by the signs “given off” or emitted by some phenomenon, such as a color (red), a certain form (ball-like), size and texture. Our eyes only perceive a front, but our embodied mind envisions the full presence of a complete object. Let’s call it an apple. Such an object is not an isolated entity:

Each object is an object within a field; each experience carries along its horizon; both belong to an order of a particular style. The physical object, for example, is interconnected with all the other objects of Nature, present, past, and future, by spatial, temporal, and causal relations, whose sum-total constitutes the order of physical Nature. (Schütz 1973, p. 298–299)

The interpretive schemes we use to transform our embodied experiences of material, social and ideational “objects” into conscious reflection, and the way we use such schemes to act and to communicate, are elements of “universes of discourse” (Schütz 1973, p. 110) such as a scientific discipline which establishes, for example, a particular “order of things” (Michel Foucault). Such universes of discourse profoundly shape our usages of signs and our ways of (inter)acting.

## 4 Beyond New Materialism? Materiality in Sociology of Knowledge Based Discourse Research

In his first successful major book, “*The order of things*,” Michel Foucault (1966/2001) analysed historical discursive formations of scientific knowledge. In many other books he followed discursive practices and objects (including architecture, torture, prisons, medical instruments) through historical settings and was interested in their interwovenness. The Sociology of Knowledge Approach to Discourse (SKAD) follows Foucault in this regard, and also adds important elements from the interpretive paradigm. It considers the *presence to us* of the material as being the result of the historical interplay between its “pure” presence, and the social relations of knowledge and politics of knowledge, power/knowledge-regimes which provide us with interpretations of such imposed, performed or produced conditions of existence in the worlds humans must deal with. A large number of discourse studies deal with how discourses shape physical materiality and are themselves shaped by such materiality, like garbage, shale gas, nuclear energy, floods, bodies and so on (cf. contributions in Keller et al. 2018).

Consider the case of household waste examined in Keller (2009). The visual and olfactory presence of household waste in the 1960s, resulting from a then new post-war level of wealth and new patterns of production and consumption in both France and Germany, became catalytic events for the re-emergence of discursive conflicts about goods, consumption, waste disposal, incineration, plastics and the like. New laws and regulations were made; new technologies of waste treatment were researched and realized. Health risks from incineration and disposal sites became discursively acknowledged from the bottom up, and were then transformed again into new technologies, including new containers for waste separation, markers on products, waste transportation across oceans, and so on. Thus a discourse study about household waste is a study about the interwovenness of materiality and symbolic orderings or discursive constructions of reality.

The very same argument holds true for ongoing studies on shale gas and hydraulic fracturing, or energy transition. Materiality comes intensely into play here, for example in the promise of shale gas exploitation. But again, as noted earlier, it is not some un-interpreted materiality accessible by itself. We always deal with *interpreted* materiality. Thus a promise of large shale gas reserves might be proven wrong when actors seek for more evidence. Discursive meaning-making is not outside or beyond the material. It is how the material becomes present for us, either imposing its presence (as in a catastrophe) or being produced in its presence (as in the development of a new technology). Discourse research does not need a particular “new” ontology and epistemology. Instead, it can

make use of the toolbox of interpretive research and discourse studies. Materiality already comes into play here in several ways:

- As physical processes which become discursive events, that is as contested stakes in struggles for the definition of a collective situation (like in a reactor catastrophe);
- as the referred-to objects of discursive structuring and discursive construction of reality (as in epistemic cultures);
- as resources or infrastructures of discourse production, including practices, bodies (people), physical resources (like computers, paper, email, conference rooms, inscription or measuring devices, experimental designs); and
- as artefacts and means of intervention of discourses into the world, produced in order to perform an effect upon some situation of intervention.

Discourses can be understood as *material social processes* of creation, stabilization and change of social realities, knowledge stocks and knowledge policies. As forms and processes of sign-based statement production, they require a material infrastructure: speaking or writing bodies, sound waves, motion executions, optical phenomena, paper and the materials necessary for the infrastructures of text production and distribution, or framework conditions for the execution of communications. In this sense, every discursive practice of performing statements is dependent on material carriers for its realization. Discursive processes themselves also generate phenomena, such as arrangements, laws, measurement procedures and measuring instruments, reports, objects of diverse kinds, through which discourses or their carriers intervene in worldly events. In the first case we can speak of discourse production dispositives (or infrastructures); in the second case of discursive world intervention dispositives (or infrastructures) (cf. Keller 2010; Keller 2019). Discourse is in itself a thoroughly *serial, symbolic and material* event that produces meaning.

Discourses also refer in another way to the materiality of the real. For discourses process whole worlds (or specific excerpts from worlds) in their execution. Discourses are discourses about or of something. They deal with problems of interpretation and action in the form of the production, objectification and de-objectification of knowledge (in the broad sense of the sociological understanding of knowledge). Discourses “about” nature classify, represent, order and connect material units through their references (such as the emphasis on similarities, classification in evolutionary genealogies, etc.), which they produce for us through their organization of specific entities from the otherwise senseless chaos of the world. Discourses can also fail because of the resistance and intervention of the



real, as history tells us again and again – resistances and interventions which have to be interpreted to become elements of defined situations.

Discourses are amongst the main processes of mediation between materialities and social collectives in contemporary societies – whether it is about diesel vehicles, air pollution, climate change or migration movements. Discursive processes create the realities of societies – along the corridors of interpretation – which bring different kinds of materialities into these processes.

In sum, I agree with Kalthoff, Cress and Röhl (2016), that materiality is a challenge to contemporary social and cultural sciences. And as in my reading of their argument, I believe sociology, among other disciplines, should focus more on how different kinds of materiality shape situations and social processes. New materialism is correct in pointing to neglects in the past. But sociology does not need a completely new metaphysics, ontology and epistemology in order to address materialities in their relations to the social. It can make use of its rich toolbox of theories, concepts and methods to address the questions discussed to date. And it may also need some new concepts and methods. But creating a new Deleuzian science would be something completely different – if it is possible at all. While some might be tempted by such an adventure, others might patiently and with passion invest in investigations into the “social life of things” (Appadurai 1986) without the need to get rid of the discipline’s rich stocks of knowledge.

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